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**Walsh et al.**

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(54) **MOLDED DOOR FACING BLANK AND METHOD OF FORMING SAME**

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(Continued)

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See application file for complete search history.

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This patent is subject to a terminal dis-  
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(60) Continuation of application No. 15/156,558, filed on  
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(Continued)

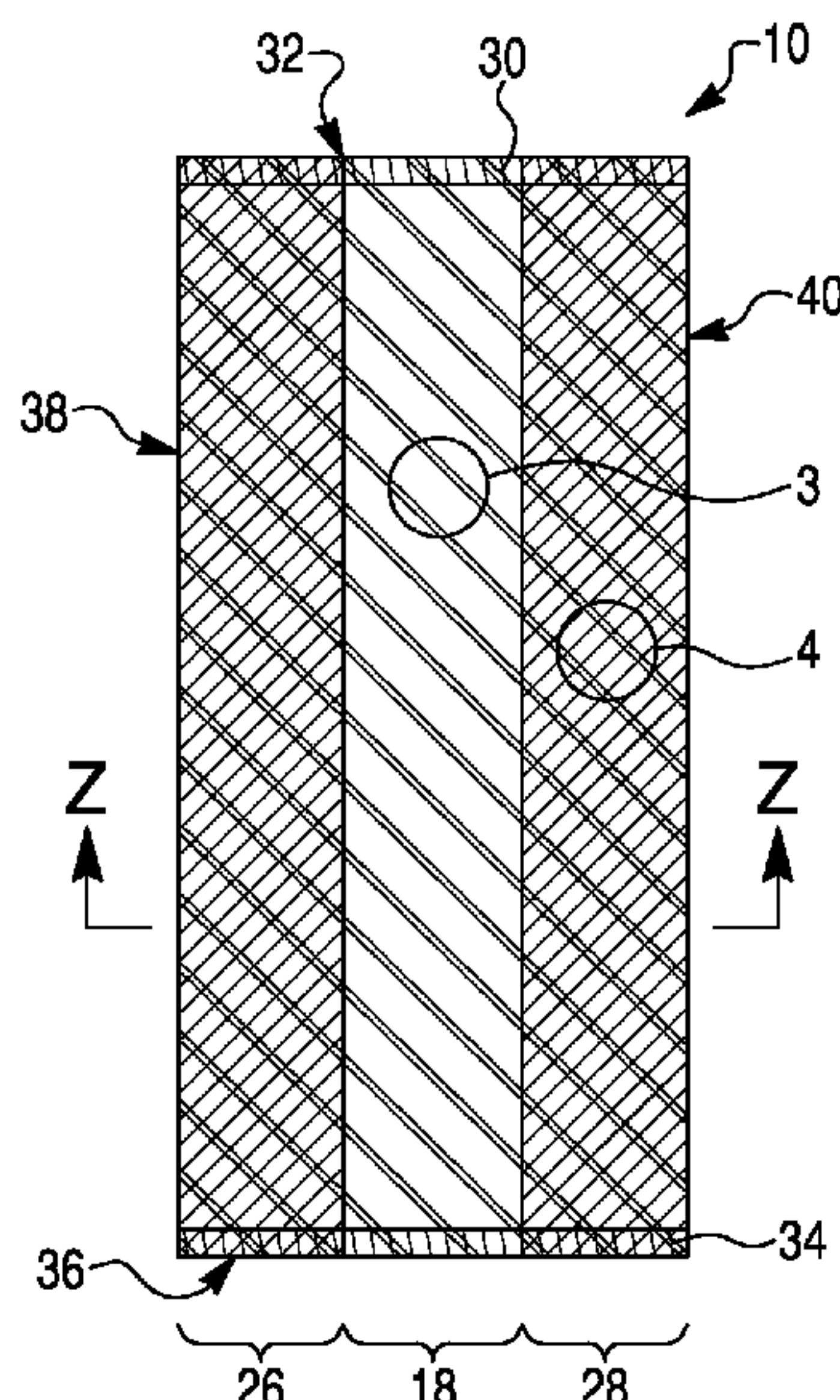
(57) **ABSTRACT**

The present invention is directed to a door facing blank  
having a first major surface with a design element formed  
therein, and an opposite second major surface. At least three  
longitudinally extending spaced stile receiving areas are  
disposed on the second major surface. Two of the stile  
receiving areas define a first width, and three of the stile  
receiving areas define a second width greater than the first  
width. The door facing blank may be trimmed to form a door  
facing having a selected width. A method of forming a door  
facing blank, and a mold press for forming a door facing  
blank are also disclosed.

(51) **Int. Cl.**  
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**E06B 3/74** (2006.01)  
(Continued)

(52) **U.S. Cl.**  
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(2013.01); **E06B 3/78** (2013.01); **B29C 59/00**  
(2013.01); **B29C 59/02** (2013.01); **B29L**

**15 Claims, 8 Drawing Sheets**



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continuation of application No. 13/828,145, filed on Mar. 14, 2013, now Pat. No. 9,341,016, which is a division of application No. 11/785,753, filed on Apr. 19, 2007, now Pat. No. 8,563,118.

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*B32B 3/30* (2006.01)  
*B29C 59/02* (2006.01)

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CPC .. *Y10T 428/2457* (2015.01); *Y10T 428/24736* (2015.01)

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Fig. 1

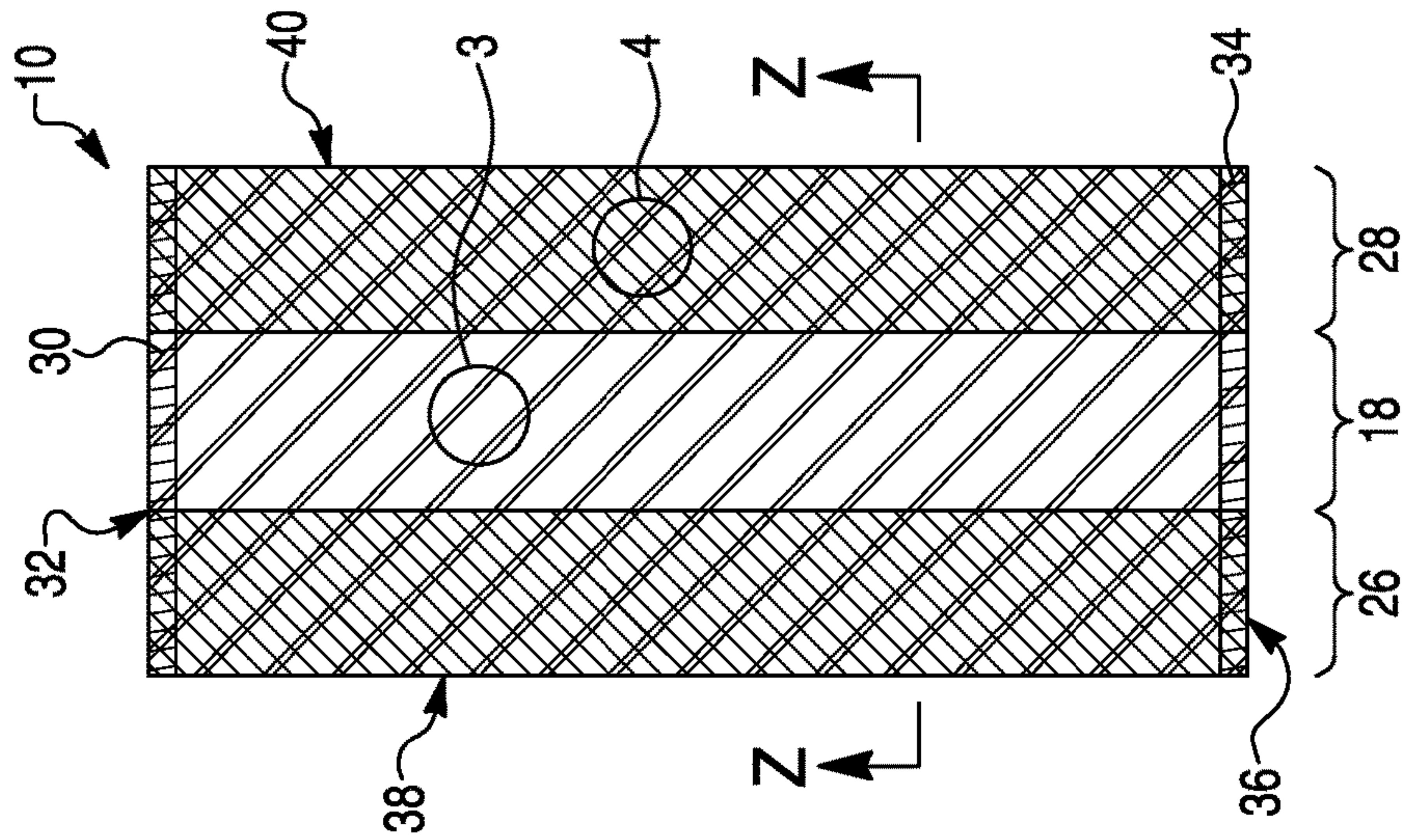


Fig. 2

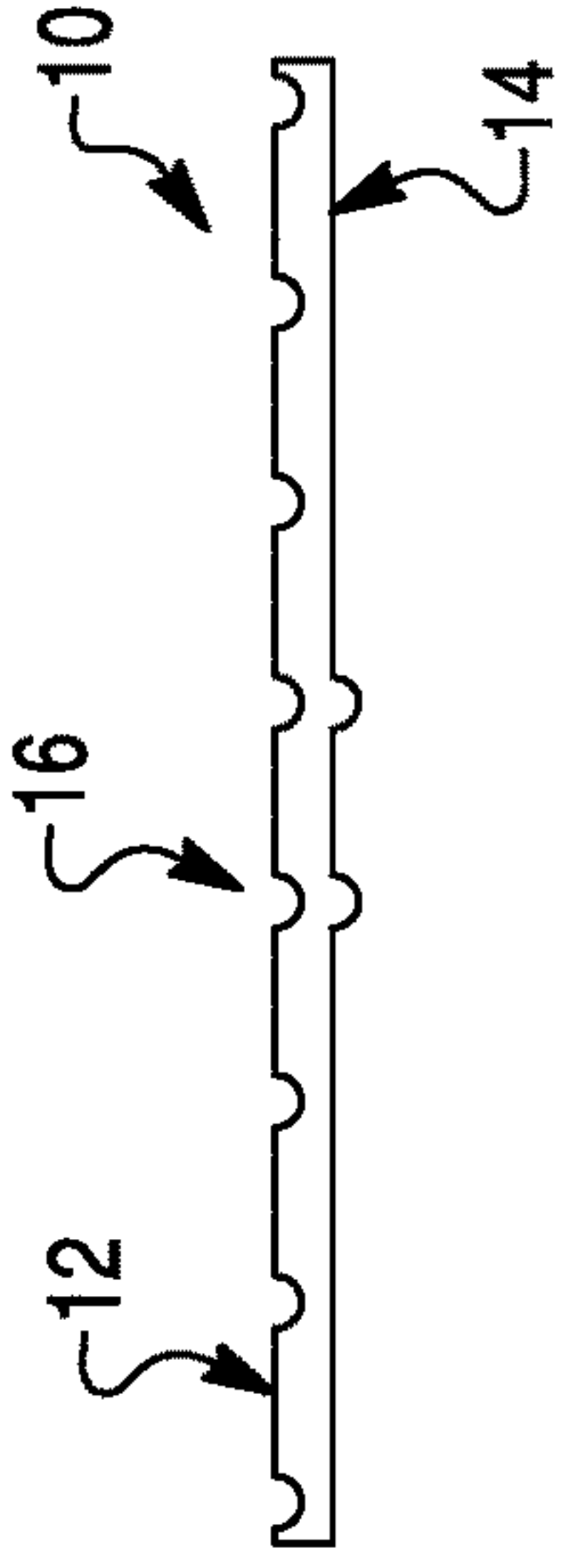


Fig. 3

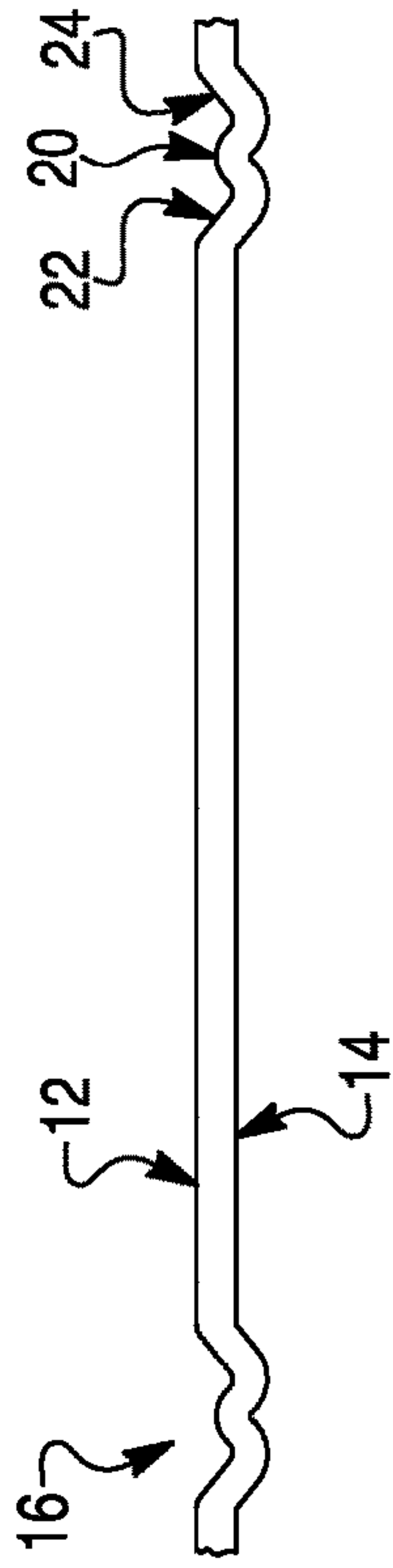


Fig. 4

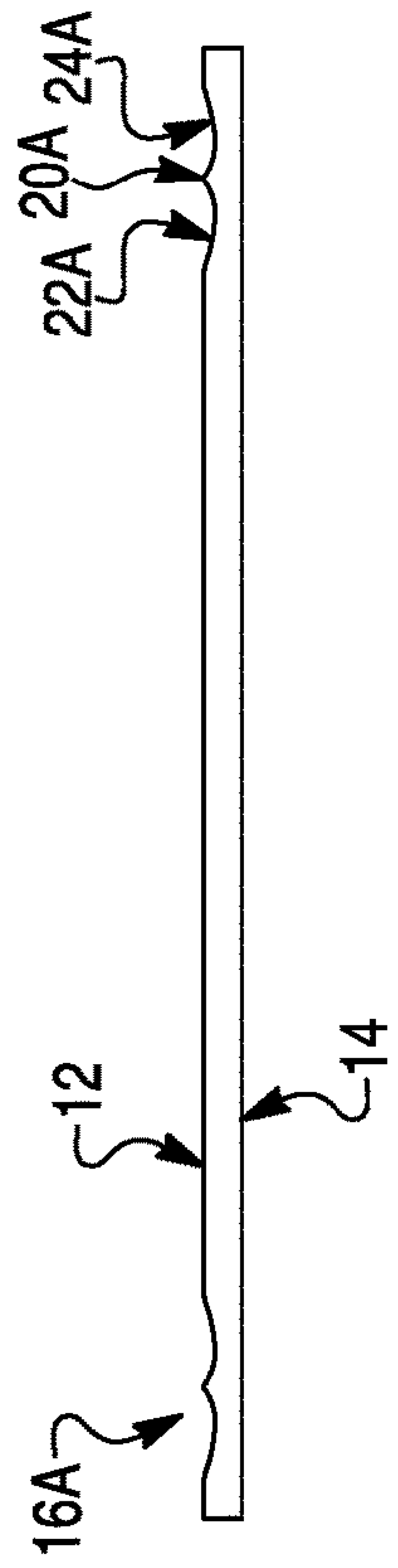




Fig. 5

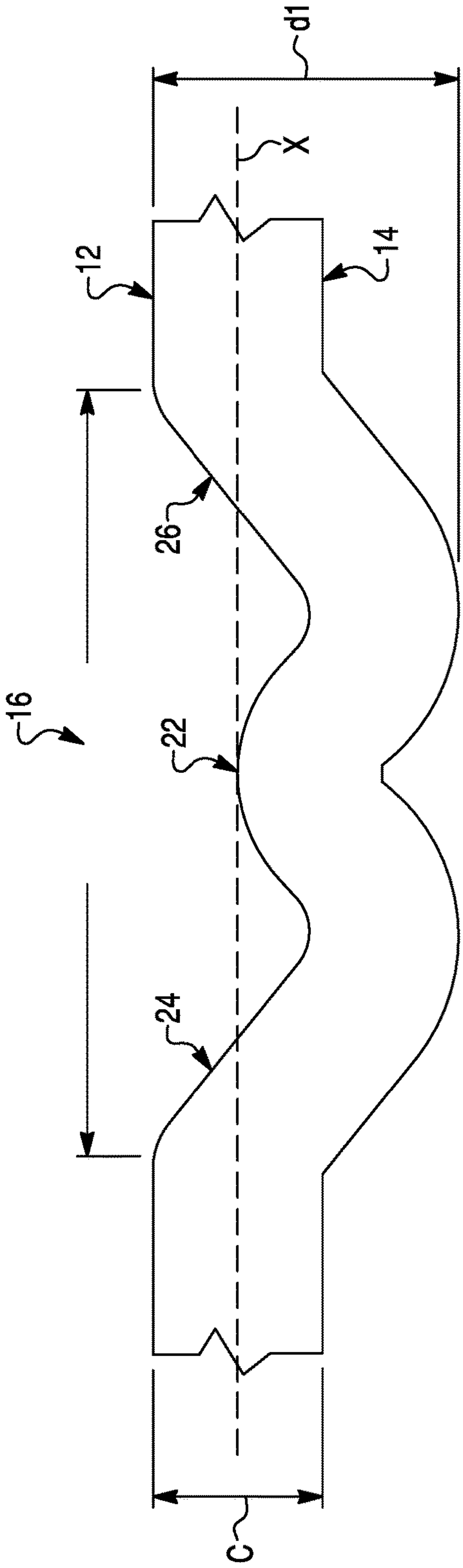
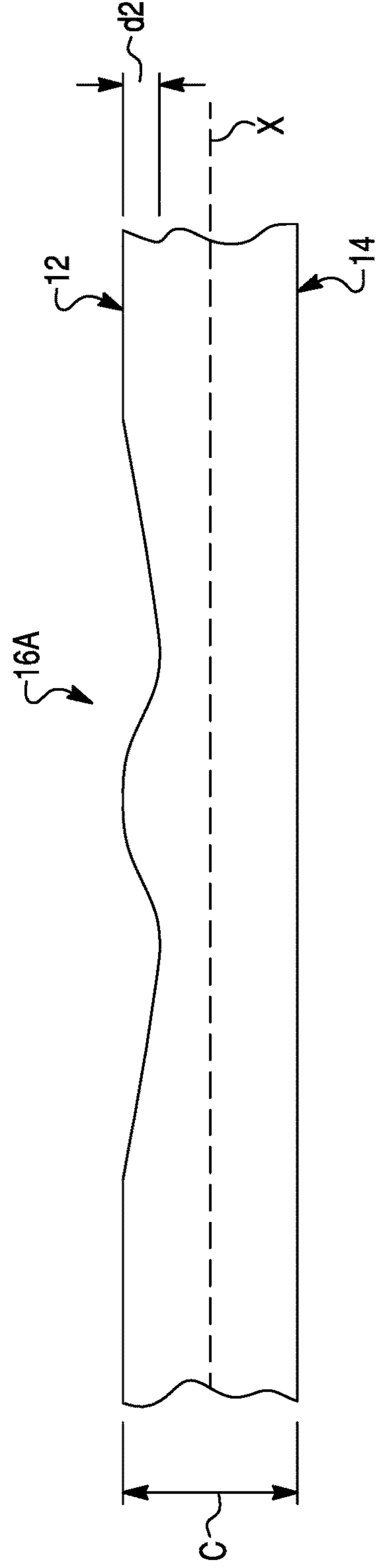


Fig. 6



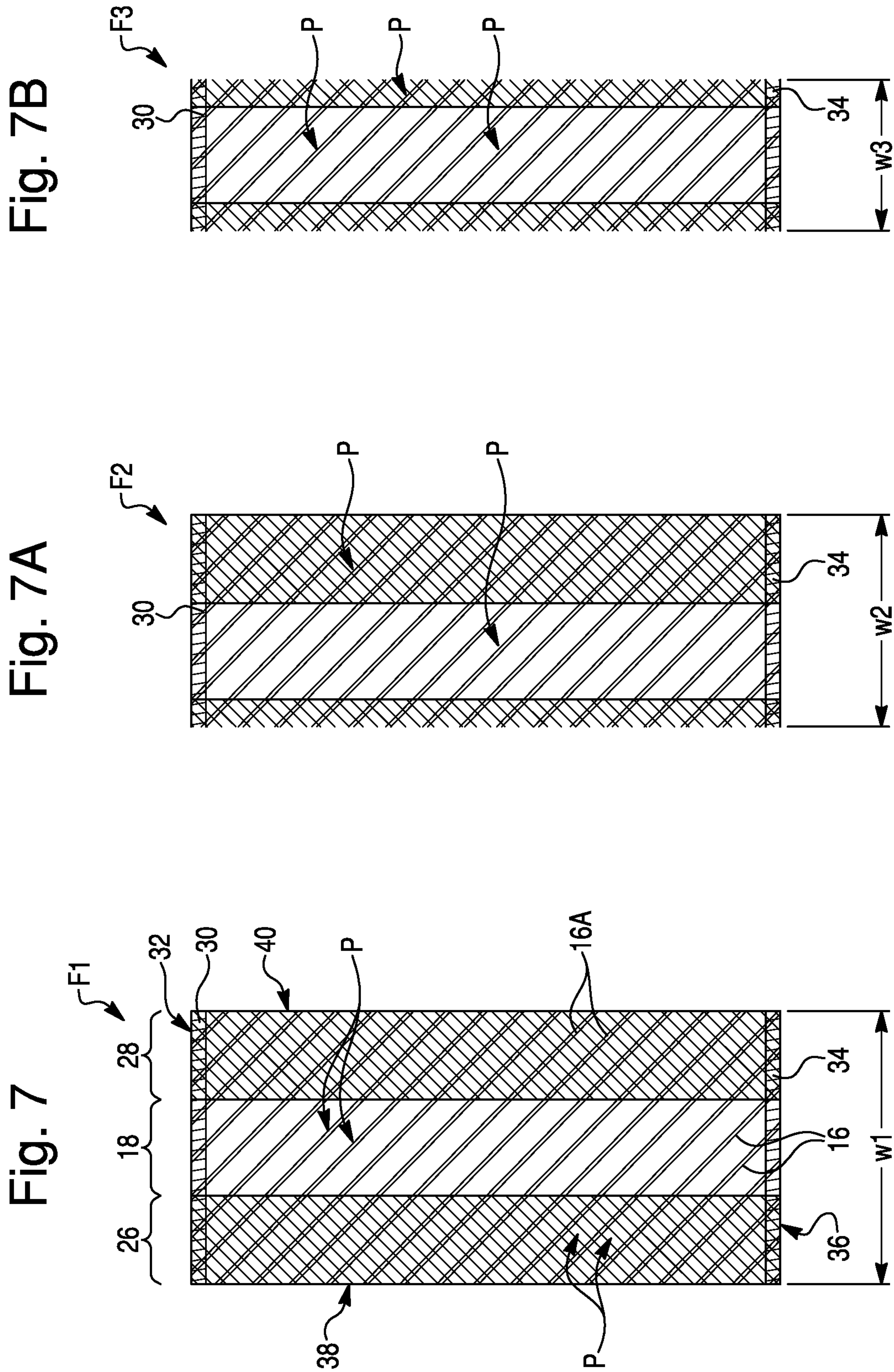


Fig. 11

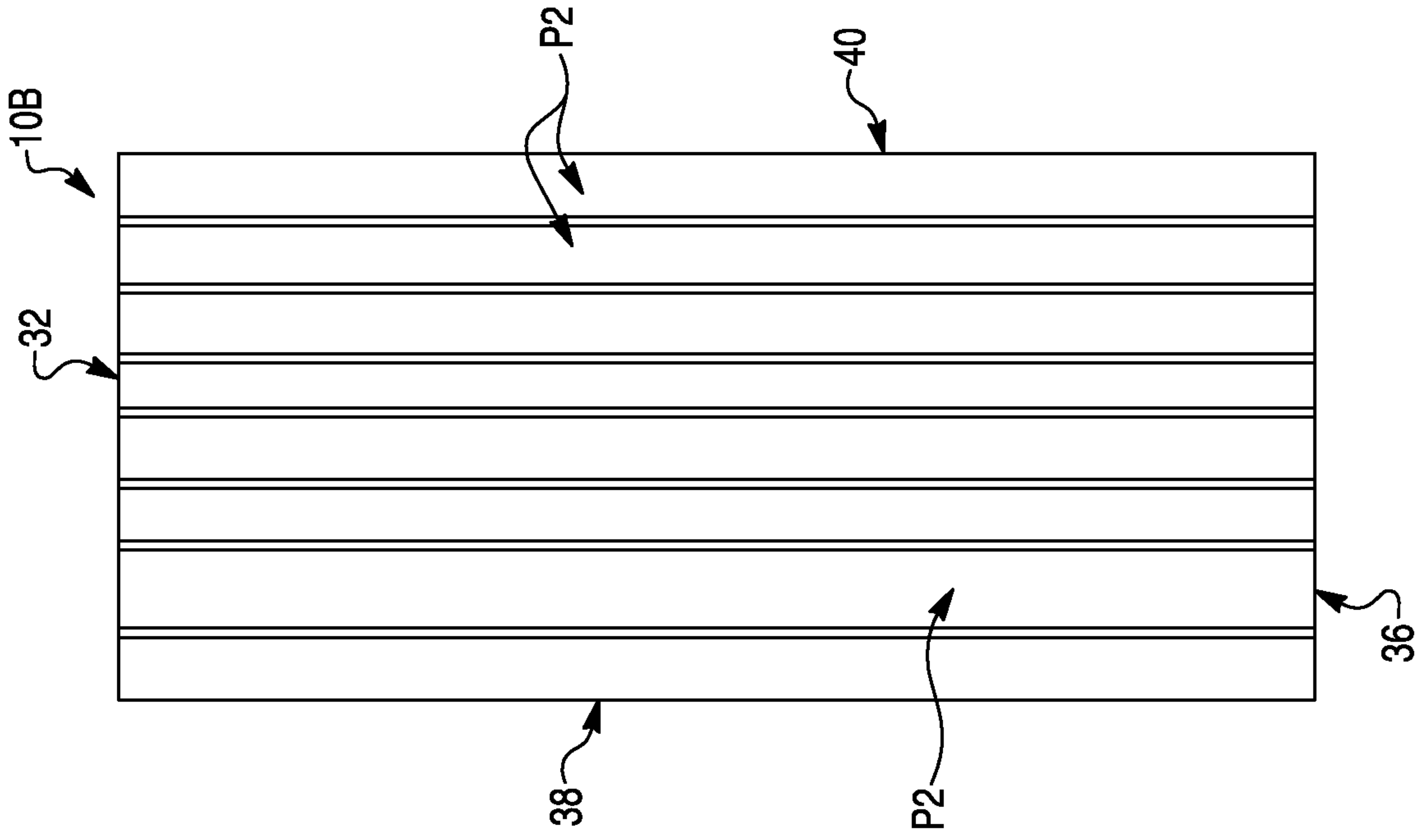


Fig. 8

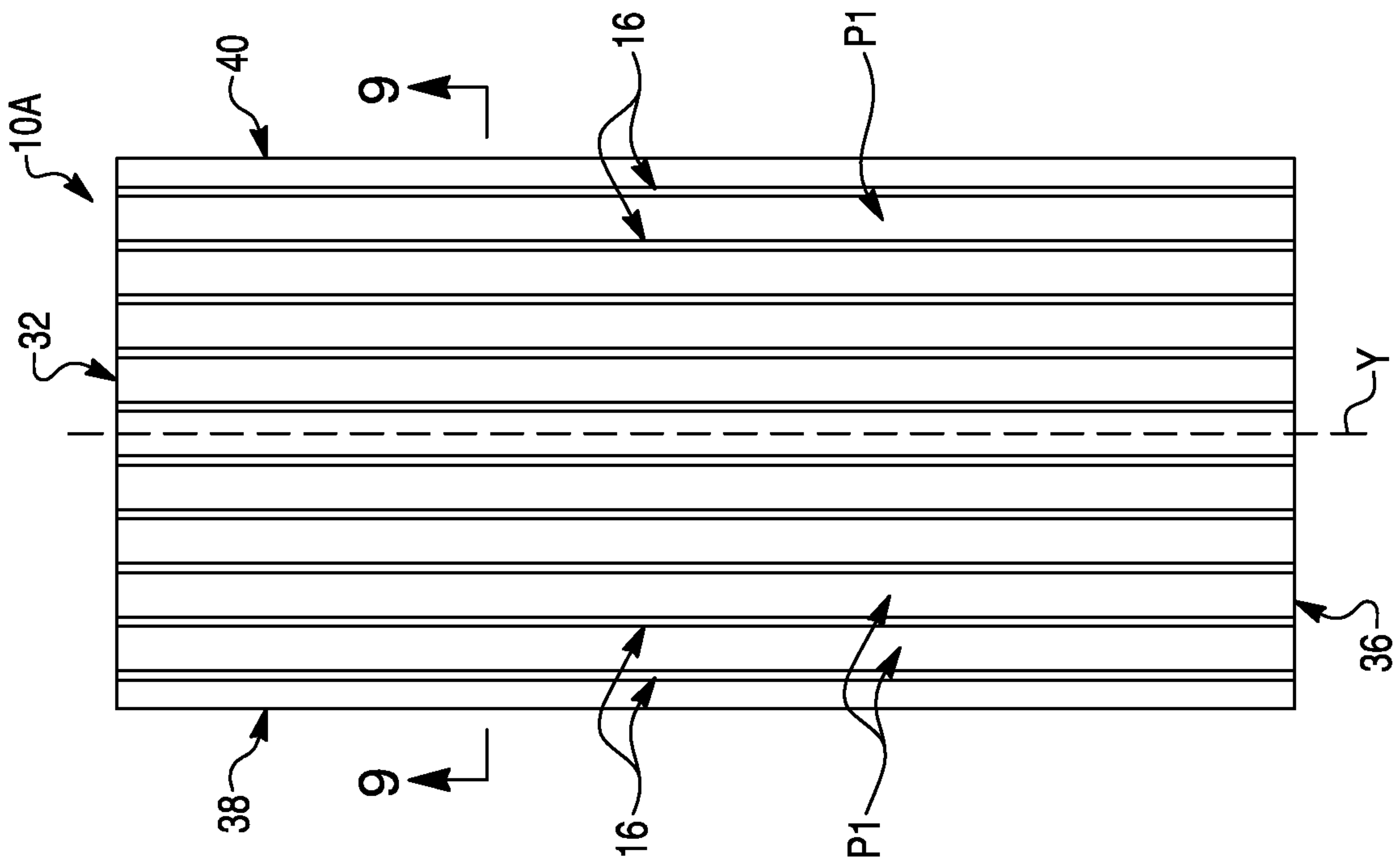


Fig. 9

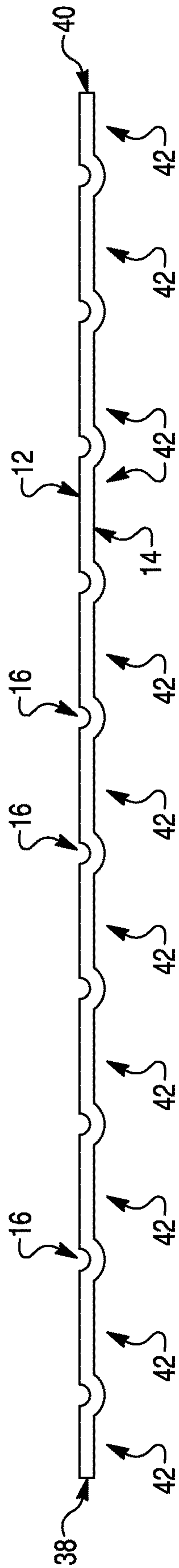


Fig. 10

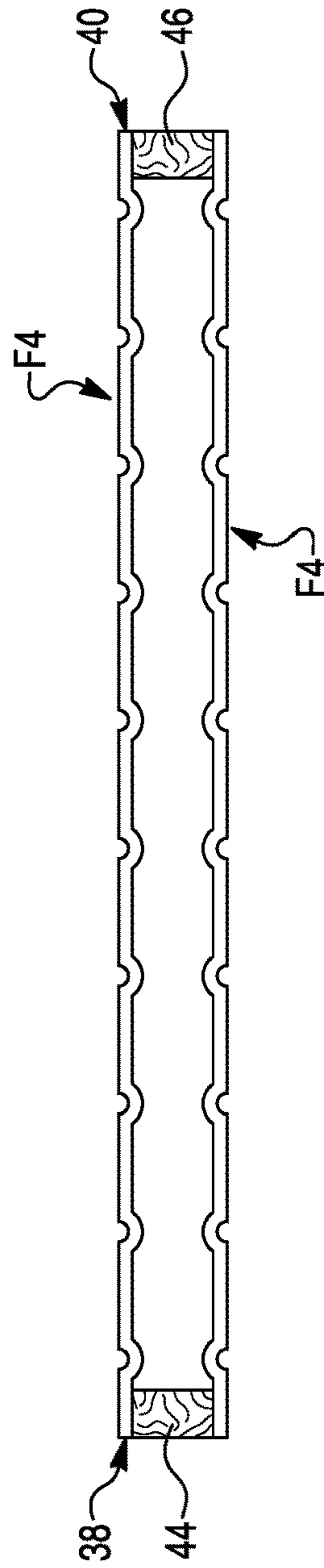


Fig. 12

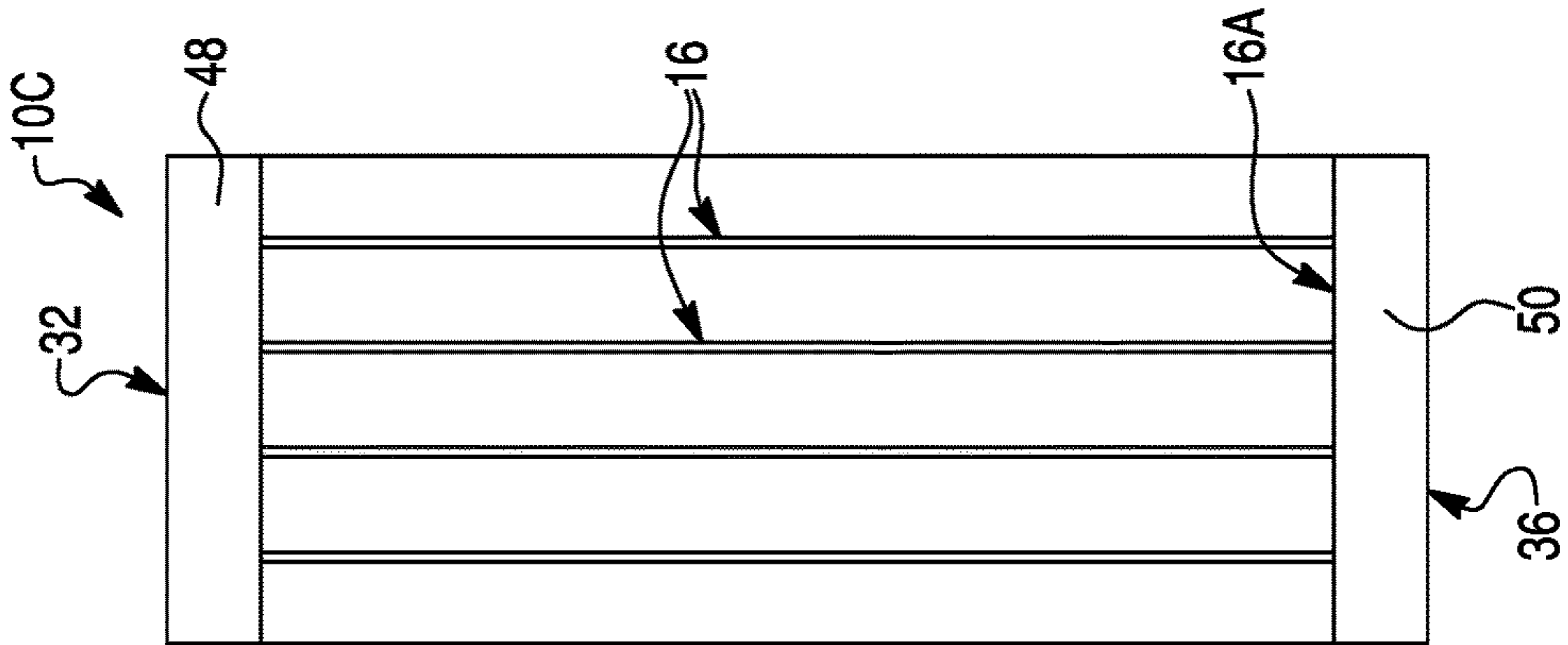


Fig. 13

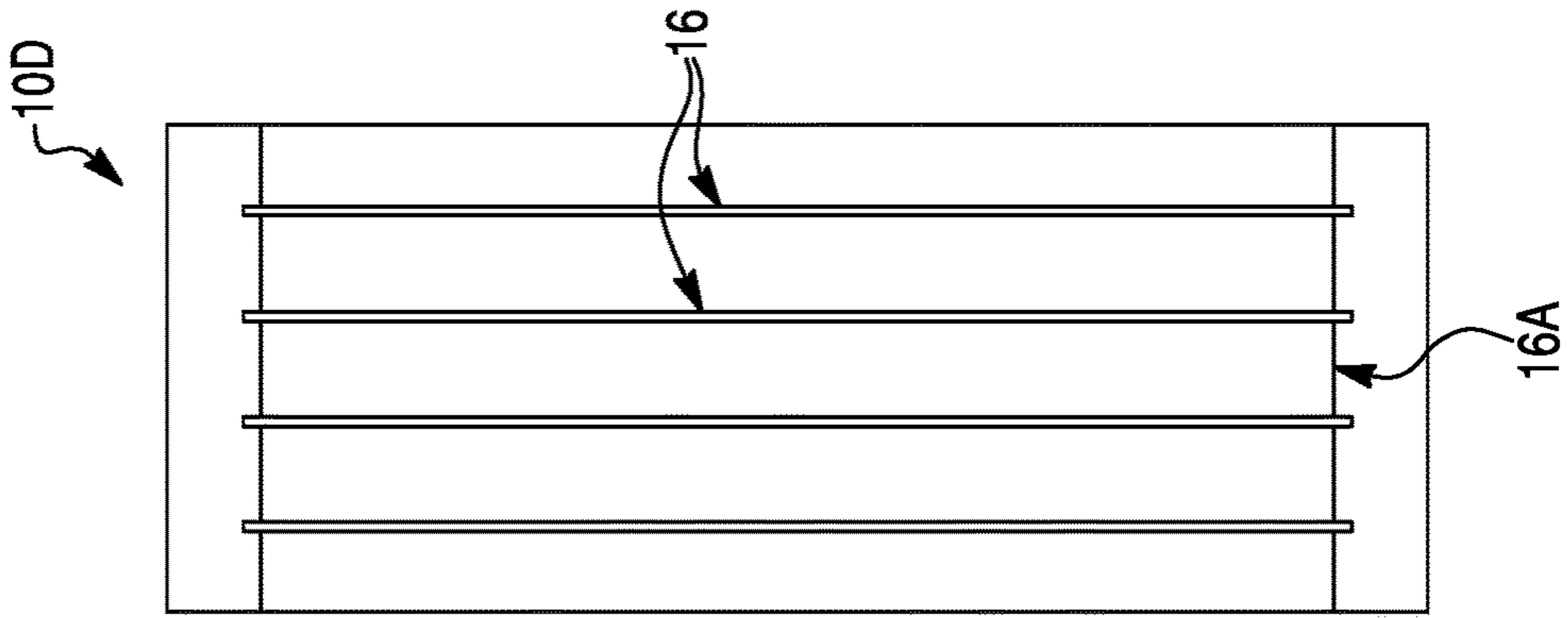


Fig. 14

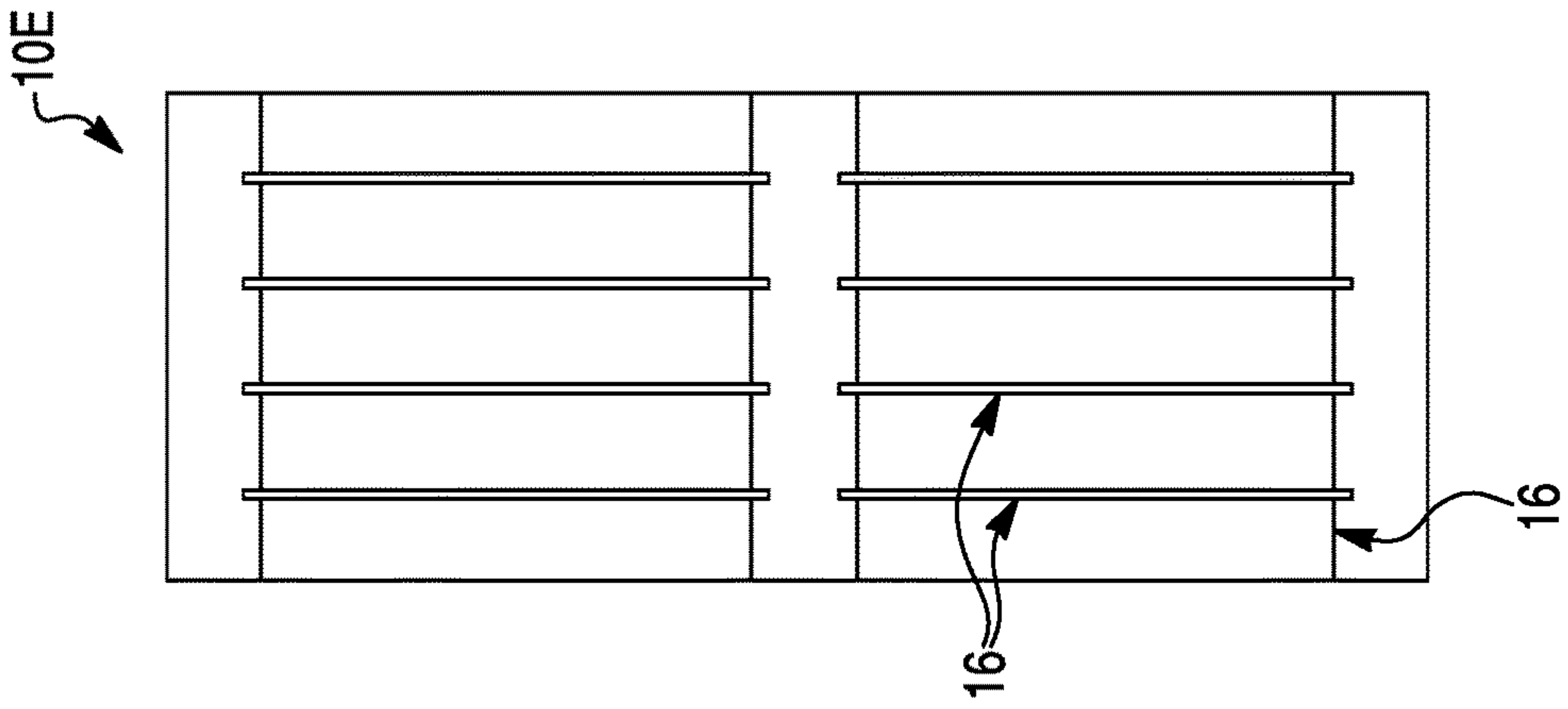


Fig. 15

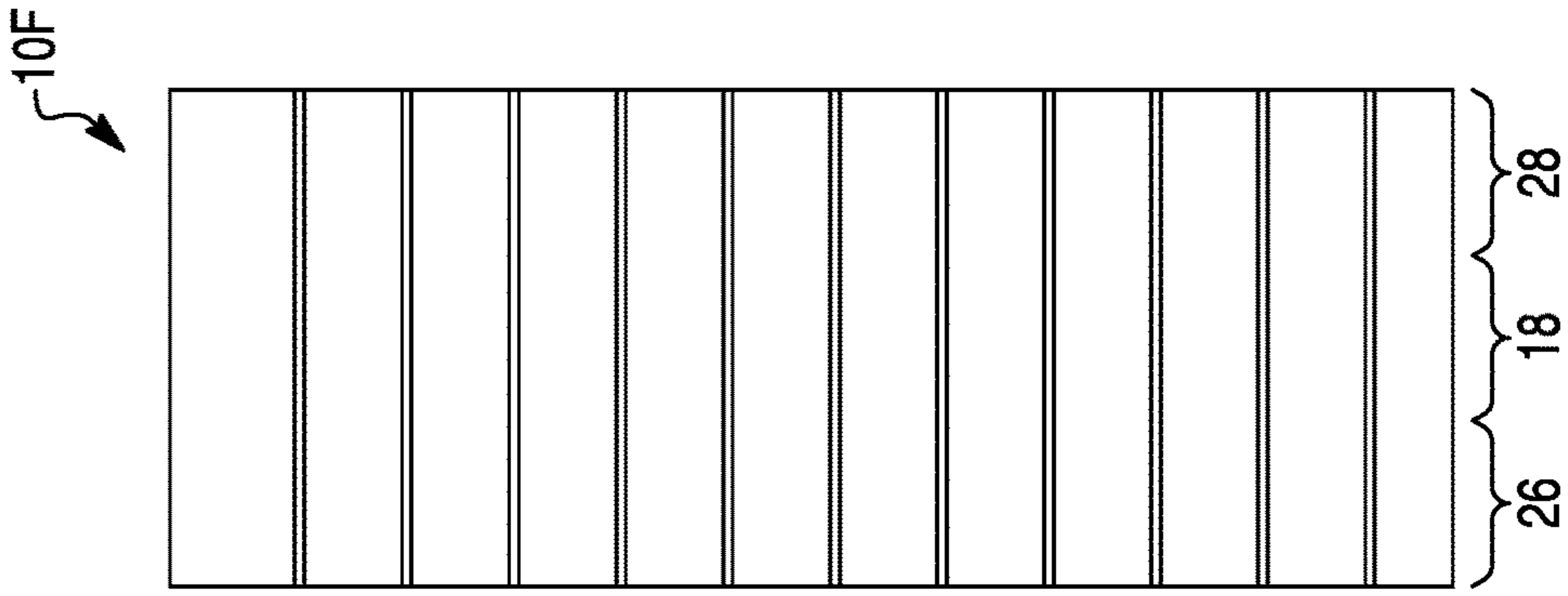




Fig. 16

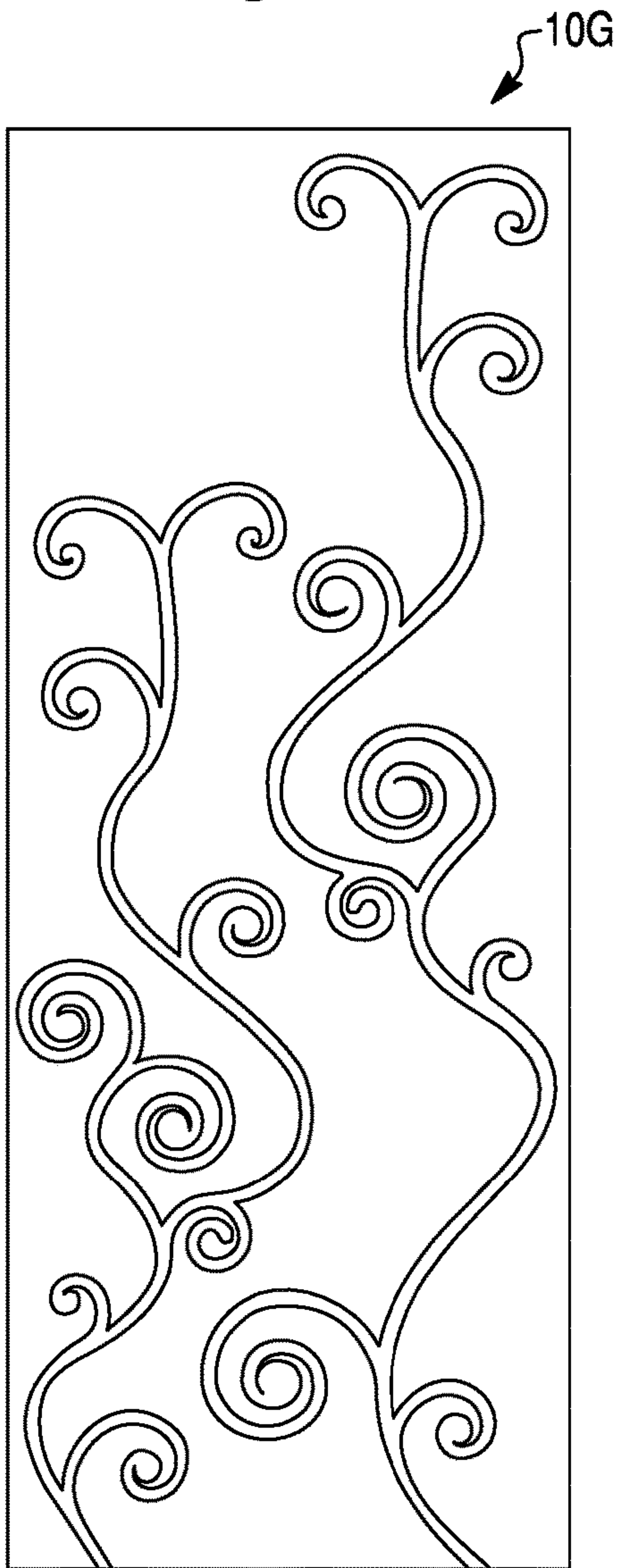


Fig. 17

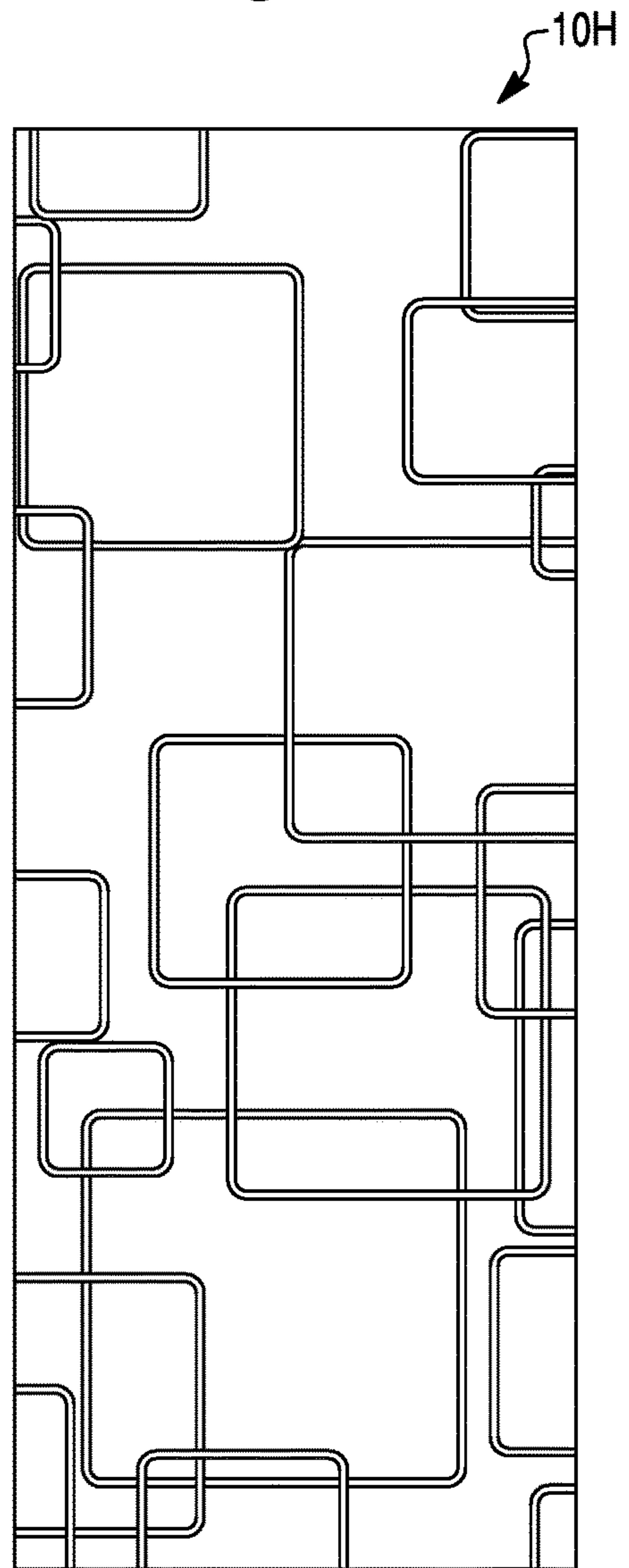
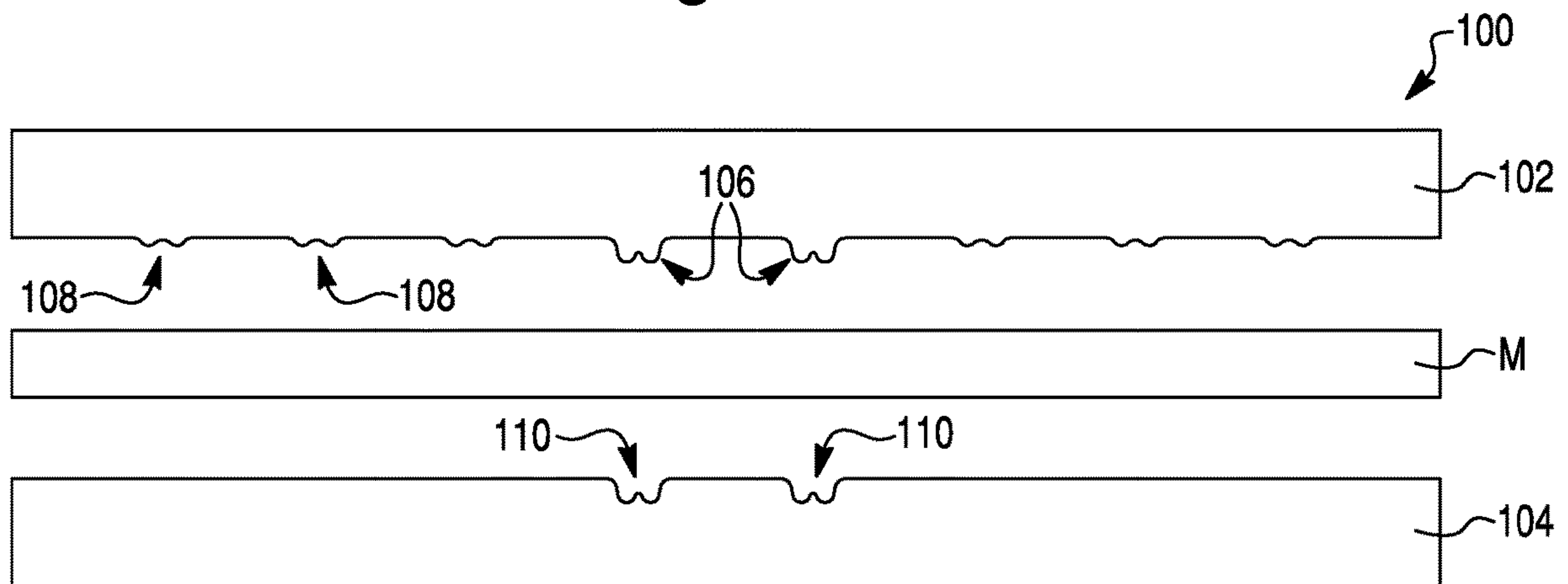


Fig. 18





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## MOLDED DOOR FACING BLANK AND METHOD OF FORMING SAME

### CROSS-REFERENCE TO RELATED APPLICATIONS AND CLAIM TO PRIORITY

This application is a continuation of non-provisional application Ser. No. 15/156,558 filed May 17, 2016, now U.S. Pat. No. 10,145,169, issued Dec. 4, 2018, which is a continuation of non-provisional application Ser. No. 13/828,145 filed Mar. 14, 2013, now U.S. Pat. No. 9,341,016, issued May 17, 2016, which is a divisional application of Ser. No. 11/785,753, filed Apr. 19, 2007, now U.S. Pat. No. 8,563,118, issued Oct. 22, 2013, the disclosures of which are incorporated herein by reference and to which priority is claimed.

### FIELD OF THE INVENTION

The present invention is directed to a door facing blank having a first major surface with a design element formed therein, and an opposite second major surface. At least three longitudinally extending spaced stile receiving areas are disposed on the second major surface. Two of the stile receiving areas define a first width, and three of the stile receiving areas define a second width greater than the first width. The door facing blank may be trimmed to form a door facing having a selected width. A method of forming a door facing blank, and a mold press for forming a door facing blank are also disclosed.

### BACKGROUND OF THE INVENTION

Hollow and solid core doors typically include a perimeter frame with first and second door facings secured to opposite sides of the frame. The door facings may be formed from composites of cellulosic material and resin binder, polymers, or metal.

Hollow or solid core doors may be of the 'flush' type, that is, one that is flat or planar on both major surfaces. Alternatively, one or both door facings may include contoured portions, architectural elements or textures. For example, a door facing may be molded to include contoured portions simulating stiles, rails and panels.

Molded and architectural features are often desirable to consumers, and may be molded or embossed into a blank during compression. However, a different die set is typically required for each size and length door facing. For example, a plurality of die sets are typically required to form door facings of different widths, even if the molded design is similar on all of the different width door facings due to the position and configuration of the molded portions on the facing. Likewise, different die sets are typically required for different length door facings, even if the molded design configuration is similar on all facings.

As such, molded door facings having contoured or architectural features are relatively expensive because the capital cost is quite high due to the need for dies, presses, and the like for each specific door facing size. The flat or planar facings used for flush doors, on the other hand, are relatively inexpensive, but do not provide the aesthetic features often desired by consumers.

### SUMMARY OF THE INVENTION

The present invention is directed to a door facing blank having a first major surface intended to be exteriorly dis-

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posed and an opposite second major surface intended to be interiorly disposed. First and second planar, spaced stile receiving areas are disposed on the second major surface. A central portion is intermediate the first and second stile receiving areas. A plurality of grooves are formed in the first major surface and define a design element. At least one of the grooves includes an embossed portion disposed in the first major surface opposite the first and second planar spaced stile receiving areas and a molded portion disposed in the central portion. At least one of the first and second spaced stile receiving areas are trimmable to form a door facing having a selected width.

The present invention also relates to a door facing blank having a first major surface intended to be exteriorly disposed and an opposite second major surface intended to be interiorly disposed. A design element is formed in the first major surface. At least three longitudinally extending spaced stile receiving areas are disposed on the second major surface. Two of the stile receiving areas define a first width, and three of the stile receiving areas define a second width greater than the first width. The door facing blank may be trimmed to form a door facing having a selected width and having a first one of the stile receiving areas adjacent a first longitudinal edge of the door facing, and a second one of the stile receiving areas adjacent a second longitudinal edge of the door facing.

A method of forming a door is also disclosed. A perimeter frame having first and second spaced stiles defining a width is provided. First and second door facing blanks are provided. Each of the blanks has a first major surface and an opposite second major surface, a design element formed in the first major surface, and a plurality of longitudinally extending spaced stile receiving areas disposed on the second major surface. First and second stile receiving areas are selected that are spaced by a distance corresponding to the width of the first and second spaced stiles. The first and second door facing blanks are trimmed adjacent the selected first and second stile receiving areas to form first and second door facings having selected widths. The first and second door facings are then secured to opposite sides of the perimeter frame, thereby forming a door.

The present invention also relates to a mold press for forming the disclosed door facing blank. The mold press includes an upper die mold and a spaced lower die mold, which form a mold cavity for molding a substrate to form the door facing blank. The upper die mold has a plurality of protrusions disposed in a first portion and embossing features disposed in a second portion. The lower die mold has a plurality of depressions aligned with and complementary to the plurality of protrusions for forming molded features in the substrate, and planar portions aligned with the embossing features for forming stile receiving areas in the substrate.

The die mold forms a door facing blank having at least three longitudinally extending spaced stile receiving areas on an intended interior surface thereof, two of the stile receiving areas defining a first width, and three of the stile receiving areas defining a second width greater than the first width. The door facing blank may be trimmed to form a door facing having a selected width.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plan view of a door facing blank having a design element according to an embodiment of the present invention, showing embossed portions in hatched line;



FIG. 2 is a sectional view of the door facing blank of FIG. 1 taken along line 2-2 and viewed in the direction of the arrows;

FIG. 3 is an enlarged sectional view of circled portion 3 of FIG. 1;

FIG. 4 is an enlarged sectional view of circled portion 4 of FIG. 1;

FIG. 5 is a fragmentary sectional view of a molded groove of a design element of the present invention;

FIG. 6 is a fragmentary sectional view of an embossed groove of a design element of the present invention;

FIG. 7 is a plan view of a door facing having a design element having molded and embossed portions, with embossed portions shown in hatched line;

FIG. 7A is a plan view of the door facing of FIG. 7 after trimming a first side portion;

FIG. 7B is a plan view of the door facing of FIG. 7 after trimming first and second side portions;

FIG. 8 is a plan view of a door facing blank having a design element according to another embodiment;

FIG. 9 is a sectional view of the door facing blank of FIG. 8 taken along line 9-9 and viewed in the direction of the arrows;

FIG. 10 is a sectional view of a door according to the present invention;

FIG. 11 is a plan view of a door facing blank having a design element according to another embodiment;

FIG. 12 is a plan view of a door facing blank having a design element according to another embodiment;

FIG. 13 is a plan view of a door facing blank having a design element according to another embodiment;

FIG. 14 is a plan view of a door facing blank having a design element according to another embodiment;

FIG. 15 is a plan view of a door facing blank having a design element according to another embodiment;

FIG. 16 is a plan view of a door facing blank having a design element according to another embodiment;

FIG. 17 is a plan view of a door facing blank having a design element according to another embodiment; and

FIG. 18 is a sectional view of a mold press according to the present invention.

#### DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

As shown in FIGS. 1 and 2, a door facing blank 10 according to the present invention includes a first major surface 12 intended to be exteriorly disposed and an opposite second major surface 14 intended to be interiorly disposed.

A design element is formed in first major surface 12. An exemplary design element according to an embodiment of the present invention is shown in FIGS. 1 and 2. The design element includes molded grooves 16 formed in a central portion 18 of blank 10, as shown in FIGS. 1-3. Molded grooves 16 extend outwardly from second major surface 14. Molded grooves 16 may include an upwardly extending central bead 20 intermediate side walls 22, 24.

The design element may also include embossed grooves 16A formed in first and second side portions 26, 28 of blank 10, as shown in FIGS. 1 and 4. Embossed grooves 16A may include upwardly extending central beads 20A intermediate side walls 22A, 24A. While embossed grooves 16A extend into first major surface 12, second major surface 14 is preferably substantially planar opposite any embossed grooves 16A, such as in first and second side portions 26, 28, as shown in FIGS. 2 and 4.

As known in the art, molding a cellulosic substrate involves re-shaping the material using heat and pressure. The cellulosic substrate is re-shaped by stretching and bending the fibers of the cellulosic material during the molding process. A geometric change in the central plane of the substrate occurs during the molding process. The central plane of a planar substrate is defined at the center of the caliper of the substrate, shown by dashed line X in FIG. 5. The depth d1 of a molded portion may be greater than the total caliper C of the substrate. For example, molded grooves 16 may be molded to a depth of about 0.07 inch or more, while the total caliper of blank 10 may be between about 0.1 to 0.2 inches. Preferably, molded grooves 16 are molded to a depth of between about 0.1 inch and about 0.5 inch. Thus, the depth d1 of molded grooves 16 may be greater than the total caliper C of blank 10. As such, a portion of molded grooves 16 extends outwardly from the plane of second major surface 14.

By contrast, embossing typically involves pressing a substrate with a textured roll or plate. This process results in a slightly contoured surface having a relatively shallow profile depth, but without a geometric change in the central plane X of the substrate, as shown in FIG. 6. Using conventional embossing techniques, the depth of a depressed portion that has been embossed into a cellulosic fiber substrate is typically less than  $\frac{1}{3}$  of the total caliper of the substrate prior to embossing. Thus, the central plane X of the cellulosic fiber substrate is not altered during the embossing process when forming embossed grooves 16A. Rather, embossed grooves 16A are simply pressed inwards toward the central plane, so that the corresponding portion of second major surface 14 opposite embossed grooves 16A is substantially planar, as shown in FIGS. 2, 4 and 6. For example, grooves 16A may be embossed into first major surface 12 to a depth d2 of about 0.005 inch or more. More preferably, embossed grooves 16A are embossed to a depth d2 of between about 0.005 inch and about 0.07 inch.

Molded grooves 16 are preferably configured and positioned on blank 10 so that second major surface 14 is substantially planar on first and second side portions 26, 28. In this way, stiles of a perimeter frame may be easily secured to planar portions of second major surface 14 at a selected position on first and second side portions 26, 28. Preferably, first and second side portions 26, 28 have a width greater than the width of the stiles to be secured thereto. In this way, blank 10 may be trimmed to a selected width, while maintaining a portion of each of first and second side portions 26, 28 for accommodating stiles. In addition, molded grooves 16 and embossed grooves 16A are configured so that even if first and/or second side portions 26, 28 are trimmed, the remaining design element on the resulting door facing is aesthetically acceptable.

Referring to FIGS. 7, 7A and 7B, embossed grooves 16A extend outwardly from and linearly with corresponding molded grooves 16. The resulting design element includes a plurality of parallel grooves 16, 16A extending angularly across the entire first major surface 12, giving the appearance of a door formed from a plurality of slanted planks P. Because first and second side portions 26, 28 are embossed, they may be trimmed to achieve a door facing having a selected width, while first major surface 12 maintains the same appearance.

For example, blank 10 having molded grooves 16 in central portion 18 and embossed grooves 16A in side portions 26, 28 may be molded to have a width w1 corresponding to a standard commercial width w1 of door facing F1, e.g. a door facing having a width of about 36 inches.



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With minimal or no trimming, blank **10** may be used as door facing **F1**, as shown in FIG. 7. First side portion **26** of blank **10** may be trimmed to form a door facing **F2** having a second width  $w_2$ , as shown in FIG. 7A. Both first and second side portions **26**, **28** may be trimmed to form a door facing **F3** having a third width  $w_3$ , as shown in FIG. 7B. The design element on first major surface **12**, which resembles a plurality of slanted planks **P**, is maintained on door facings **F2** and **F3**, despite first and/or second portions **26**, **28** having been trimmed, and even if unequal portions of first and second portions **26**, **28** have been trimmed.

Blank **10** may be trimmed using any conventional cutting method to form a door facing having any one of a plurality of different widths due to the configuration and positioning of molded grooves **16** and embossed grooves **16A**, which maintain an aesthetically acceptable design element on all door facing widths. For example, predetermined portions of blank **10** may be trimmed to form a door facing having one of eleven selectable widths. Conventional methods of forming door facings having the same molded design element but different widths typically require a separate die mold for each width. Blank **10** therefore substantially reduces manufacturing costs because a plurality of different width door facings may be formed from the same blank **10**, which is formed from a single die mold.

It should be understood that more than three different width door facings may be formed from blank **10**, given the widths of first and second side portions **26**, **28** are substantially greater than the stiles to be secured thereto. Preferably, a portion of each of first and second side portions **26**, **28** remains after trimming and has a width at least equal to the width of the stile to be secured thereto, so that a substantially planar longitudinally extending surface is provided for receiving the corresponding stile.

Blank **10** also preferably includes a first rail receiving area **30** adjacent a first end **32** of blank **10**, and a second rail receiving area **34** adjacent a second end **36** of blank **10**, as shown in FIGS. 1 and 7-7B. Rail receiving areas **30**, **34** preferably extend horizontally across blank **10**, perpendicular to longitudinal edges **38**, **40** thereof. As such, rail receiving areas **30**, **34** extend through first and second side portions **26**, **28** as well as central portion **18**. Preferably, portions of the design element formed in first major surface **12** and extending into rail receiving areas **30**, **34** are embossed (e.g. embossed grooves **16A**), as opposed to molded (e.g. molded grooves **16**). In this way, the corresponding second major surface **14** opposite rail receiving areas **30**, **34** is substantially planar for accommodating the rails of a perimeter frame.

Blank **10** may also be configured so that the design element does not extend into rail receiving areas **30**, **34**. For example, first major surface **12** may include upper and lower planar portions resembling rails. Further, rail receiving areas **30**, **34** may be configured to be wider than the width of the rails to be secured thereto, so that portions of rail receiving areas **30**, **34** may be trimmed while still maintaining a portion sufficient for accommodating the rails of the perimeter frame. In this way, blank **10** may be trimmed to form a door facing having a selected length as well a selected width.

It should be understood that the design element formed in blank **10** is not limited to a specific configuration and position of slanted grooves **16**, **16A** shown in FIGS. 1, 2 and 7-7B. Moreover, the specific configurations of grooves **16**, **16A** are not limited to that shown in FIGS. 3 and 4. Rather, various configurations of a design element are possible with the present invention.

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For example, a blank **10A** may be formed having a design element including a plurality of grooves **16** extending parallel to longitudinal edges **38**, **40**, as shown in FIG. 8. Grooves **16** may be evenly spaced to define a plurality of longitudinally extending planks **P1** having uniform widths. Planks **P1** may extend from first end **32** of blank **10A** to second end **36**.

The design element of blank **10A** may include all molded grooves **16**, as shown in FIG. 9. Because molded grooves **16** include portions extending outwardly from second major surface **14**, molded grooves **16** are preferably spaced to form stile receiving areas **42** disposed on second major surface **14** at predetermined positions. For example, blank **10A** may include eleven stile receiving areas **42**. Blank **10A** is configured so that stile receiving areas **42** adjacent longitudinal edges **38**, **40** accommodate first and second stiles **44**, **46** of a perimeter frame, as shown in FIGS. 9 and 10. Stile receiving areas **42** are preferably substantially planar.

Similar to blank **10**, the entire width of blank **10A** defines a door facing **F4** having a width (e.g. first width  $w_1$ ) which includes all molded grooves **16**, as shown in FIGS. 8-10. Molded grooves **16** are spaced and configured in such a way so that blank **10A** may be trimmed to any one of a plurality of door facing sizes. Specified portions of blank **10A** are removed so that second major surface **14** can still accommodate stiles **44**, **46** after trimming. The rails of the perimeter frame may be notched to accommodate molded grooves **16**. Thus, a plurality of different door facings may be formed from a single blank **10A**, and thus from a single die mold.

It should be understood that the specific widths of planks **P1** (or **P**) and spacing of grooves **16** may vary as desired. For example, planks **P1** (or **P**) may have substantially uniform widths of at least about 3 inches, and grooves **16** may be offset from a longitudinal center plane, as shown by dashed line **Y** in FIG. 8. Such a configuration and position of grooves **16** allows blank **10A** to be trimmed to form a door facing having any one of a plurality of widths (e.g. standard commercial widths of 12 inches, 18 inches, 20 inches, 24 inches, 26 inches, 28 inches, 30 inches, 32 inches, 34 inches, or 36 inches; or standard commercial metric doors widths as known in the art). Thus, blank **10A** may be used to form 10 or more different door facings having different widths.

Each plank **P1** preferably has a width at least equal to the width of stile **44** (or **46**), given the width of planks **P1** define the width of stile receiving areas **42**, as shown in FIGS. 9 and 10. In addition, the widths of planks **P1** need not be uniform. For example, a blank **10B** having a design element including a plurality of molded grooves **16** (and/or embossed grooves **16A**) may be provided wherein the widths of planks **P2** vary, as shown in FIG. 11.

Design elements may be provided wherein molded grooves **16** (and/or embossed grooves **16A**) do not extend across the entire first major surface **12** from first end **32** to second end **36**, or from longitudinal edge **38** to longitudinal edge **40**. For example, a blank **10C** having a design element including a first rail portion **48** adjacent first end **32** and a second rail portion **50** adjacent second end **36**, as shown in FIG. 12. First and second rail portions **48**, **50** are preferably substantially planar. As such, corresponding rail receiving areas **30**, **34** are provided on second major surface **14**, as described above, which are likewise planar and accommodate rails of the perimeter frame. First and second rail portions **48**, **50** are preferably defined by embossed grooves **16A**, so that a planar surface extends the entire length of the blank for accommodating stiles of the perimeter frame.

Blanks **10D**, **10E** and **10F** having other exemplary design elements including linearly extending, molded grooves **16**



and/or embossed grooves **16A** are shown in FIGS. **13**, **14** and **15**. As described above, the design element may include both molded and embossed features. Design elements including features primarily extending horizontally, such as the design element of blank **10F** shown in FIG. **15**, preferably include embossed grooves **16A** in first and second side portions **26**, **28**, and molded grooves **16** in central portion **18**, as described above.

The design element formed in the blank of the present invention is not limited to parallel, linearly extending grooves **16**, **16A**. For example, a blank **10G** having an organic design element may be formed in first major surface **12**, as shown in FIG. **16**. Any organic design element, such as a design pattern having the characteristics of a living organism(s) such as a plant or flower, may be formed in first major surface **12**. Alternatively, a blank **10H** having a design element including a geometric configuration may be formed in first major surface **12**, as shown in FIG. **17**. Any geometric design element, such as a design pattern characterized by straight lines, triangles, circles, squares, or similar regular forms, may be formed in first major surface **12**.

It should be understood that relatively complex design elements may also be provided, such as a plurality of concentric circles or textured surface. It may be desirable to form such complex design elements by embossing only, given it may be more difficult to mold such features compared to embossing. However, all design elements provide that the blank may be easily trimmed to any desired length and width while maintaining a commercially acceptable design element on first major surface **12**.

Other molded and/or embossed design elements not specifically shown in the figures are also within the scope of the disclosed invention. Regardless of the specific design element provided, predetermined portions of the blank may be trimmed along one or both longitudinal edges **38**, **40** to achieve the desired facing width, while providing areas on second major surface **14** for accommodating stiles and/or rails (e.g. planar first and second side portions **26**, **28**; stile receiving areas **42**; and/or rail receiving areas **30**, **34**).

The cost of manufacturing a plurality of door facings having different widths but similar design elements is substantially reduced given one blank (e.g. blanks **10-10H**) may be used to form a door facing having a selected width and length. Moreover, only one die mold is required to form the blank, thereby minimizing the number of die molds required. Referring to FIGS. **1**, **2** and **18**, blank **10** may be formed from a mat **M** of cellulosic fiber material and resin binder, as known in the art. Mat **M** is disposed within a mold press **100** having an upper die mold **102** and a lower die mold **104**, and compressed therebetween using heat and pressure. Upper die mold **102** may include outwardly extending protrusions **106** for forming molded portions **16** in the resulting blank **10**, and embossing portions **108** for forming embossed portions **16A**. Lower die mold **104** includes depressions **110** corresponding to protrusions **106**. However, areas corresponding to embossing portions **108** are planar, thereby forming planar areas on second major surface **14** of the resulting blank **10** (e.g. first and second side portions **26**, **28**).

Thus, one mold press **100** having the desired design element may be used to form a plurality of door facings having different widths, thereby substantially reducing manufacturing costs. While die mold **100** is described as molding a cellulosic mat **M**, it should be understood that a die mold for post-molding a wood composite panel may also be provided, or for molding other materials such as a

polymer composite (e.g. sheet molding compound or fiberglass reinforced composites) or metal (e.g. steel or aluminum).

The present invention is also directed to a method of forming a door. A perimeter frame having first and second spaced stiles **44**, **46** is provided. First and second door facing blanks **10** (or blanks **10A-H**) are provided having a design element, as described above, and a plurality of stile receiving areas **42**. First and second stile receiving areas **42** are selected, which are spaced by a predetermined distance. Blanks **10** are then trimmed adjacent the selected stile receiving areas **42**, thereby forming door facings having widths that will correspond to the width of the perimeter frame. The door facings may then be secured to opposite sides of the perimeter frame, as shown in FIG. **10**.

While the invention has been described in connection with specific embodiments thereof, it will be understood that it is capable of further modifications. This application is intended to cover any such modifications, variations, or adaptations of the invention provided they come within the scope of the following claims or their equivalents.

We claim:

1. A door, comprising:

a perimeter door frame having first and second surfaces opposite to one another, the perimeter door frame comprising first and second stiles and first and second rails;

a first door facing blank having an interior surface facing towards the door frame and an opposite exterior surface facing away from the door frame, the first door facing blank comprising

first and second side portions associated with opposite side edges of the first door facing blank, the interior surface of the first side portion and the interior surface of the second side portion being planar and contacting and secured to the first surface of the first and second stiles, respectively, the first side portion including an embossed groove in the exterior surface opposite to the interior surface of the first side portion and the first surface of the first stile; and

an intermediate portion interposed between and integrally formed with the first and second side portions, the exterior surface of the intermediate portion comprising a molded groove that extends from the embossed groove so that the molded and embossed grooves collectively define a design element extending continuously from the first side portion to at least the intermediate portion, the interior surface of the intermediate portion comprising a protrusion opposite to the molded groove, wherein the embossed groove does not extend into the intermediate portion; and

a second door facing blank secured to the second surface of the frame.

2. The door of claim 1, wherein the first and second side portions are trimmable to reduce an overall width of the first door facing blank.

3. The door of claim 1, wherein the molded groove has a depth between about 0.1 inch and 0.5 inch.

4. The door of claim 3, wherein the embossed groove has a depth between about 0.005 inch and about 0.007 inch.

5. The door of claim 1, wherein the molded groove and the embossed groove have first and second depths, respectively, and wherein the first depth is greater than the second depth.



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6. The door of claim 1, wherein the molded groove has a depth that is greater than a thickness of the first door facing blank.

7. The door of claim 1, wherein the molded groove and the embossed groove are linearly arranged with respect to one another to form a continuous line.

8. The door of claim 1, wherein the second door facing blank has an interior surface facing towards the door frame and an opposite exterior surface facing away from the door frame, the second door facing blank comprising:

third and fourth side portions associated with opposite side edges of the second door facing blank, the interior surface of the third side portion and the interior surface of the fourth side portion being planar and contacting and secured to the second surface of the first and second stiles, respectively, the second side portion including an embossed groove in the exterior surface opposite to the interior surface of the second side portion and the second surface of the first stile; and

an intermediate portion interposed between and integrally formed with the third and fourth side portions, the exterior surface of the intermediate portion comprising a molded groove that extends from the embossed groove so that the molded groove and the embossed groove collectively define a design element extending continuously from the third side portion to at least the intermediate portion, the interior surface of the intermediate portion comprising a protrusion opposite to the molded groove.

9. A door, comprising:

a perimeter door frame having first and second surfaces opposite to one another, the perimeter door frame comprising first and second stiles and first and second rails;

a first door facing blank having an interior surface facing towards the door frame and an opposite exterior surface facing away from the door frame, the first door facing blank comprising

first and second side portions associated with opposite side edges of the first door facing blank, the interior surface of the first side portion and the interior surface of the second side portion being planar and contacting and secured to the first surface of the first

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and second stiles, respectively, the first side portion including a first embossed groove in the exterior surface opposite to the interior surface of the first side portion and the first surface of the first stile, the second side portion including a second embossed groove in the exterior surface opposite to the interior surface of the second side portion and the first surface of the second rail; and

an intermediate portion interposed between and integrally formed with the first and second side portions, the exterior surface of the intermediate portion comprising a molded groove that extends from the first and second embossed grooves so that the molded groove and the first and second embossed grooves collectively define a design element extending continuously from the first side portion to at least the second side portion, the interior surface of the intermediate portion comprising a protrusion opposite to the molded groove, wherein the first and second embossed grooves do not extend into the intermediate portion; and

a second door facing blank secured to the second surface of the frame.

10. The door of claim 9, wherein the first and second side portions are trimmable to reduce an overall width of the first door facing blank.

11. The door of claim 9, wherein the molded groove has a depth between about 0.1 inch and 0.5 inch.

12. The door of claim 11, wherein the first and second embossed grooves have a depth between about 0.005 inch and about 0.007 inch.

13. The door of claim 9, wherein the molded groove and the embossed grooves have first and second depths, respectively, and wherein the first depth is greater than the second depth.

14. The door of claim 9, wherein the molded groove has a depth that is greater than a thickness of the first door facing blank.

15. The door of claim 9, wherein the molded groove and the first and second embossed grooves are linearly arranged with respect to one another to form a continuous line.

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